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Dedicated to the 150th Anniversary and
The 1st Congress of World Engineers and
Riga Polytechnical Institute / RTU Alumni

DIGEST

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Development Prospect of Cargo Terminal Mangali

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Keywords – railway transportation, cargo terminal, examination of carriages, automation.

I. Introduction

There is slight increase of various kinds of transported cargos in Latvia railway transportation. When comparing transported cargo volumes of LDZ Cargo in last six years, then it is clearly seen that the greatest transported cargo volume was in year 2011, when it reached 59 385 thousand tons.

II. Mangali Cargo Terminal

The amount of the Mangali terminal cargos is increasing steadily, however the more rapid development is constantly delayed by the outdated infrastructure in the area of the Mangali cargo terminal. As there is not enough quantity of cargo gateways, the total carrying capacity of terminal is decreased highly.

In order to insure more effective work of the Mangali cargo terminal, few more cargo inbound and outbound gateways in terminal are needed, which would ensure higher carrying capacity and increased the time in which a carriage is handled. As the terminal works according to certain forming plan, then it is necessary to ensure the execution of it.

Fig. 1. Ezera street Railway move in Mangalu cargo terminal

Mangalu cargo terminal is crossed by the Ezera street move, that limits the general terminal action substantial, because it is not possible 24 hours in the day-time to use a move, additional work and time are necessary also the that adjusting of this railway. Park of the his transversal "B" 6a., 7., 8., 9., 10.a. roads and tricks into a road, which joins to 6.a.travel with 70.pointer.

III. Possible Decisions

It is impossible to provide cargo delivery from cargo terminals to Freeport enterprises in Riga in time, when moves "Ezera Street" and "Tilta Street" are closed. Work stops in these terminals, when these moves are open for inhabitants of Riga.

LDz hopes, that also Riga City Council will search a decision for this problem, constructing a crossing of two levels free motor transport and pedestrians motion in this district, then the populations of Riga will not suffer and also so important railway transportations. [1]

Very important is automation of cargo flows in Mangalu cargo terminal. Examination and verification of all carriages works in is the terminal of the Mangalu loads executed hand, using human resources, that prolongs treatment of compositions of all carriages time substantial. A 1 hour is given instantly released examination of load carriages, but automatizing a carriage stand reviews, is possible to diminish this time to the minimum, which gives substantial changes in all in a terminal action.

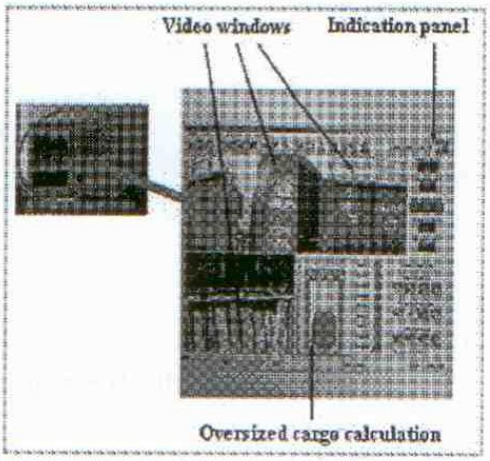

Fig. 2. Automation of wagon inspection work

Special equipment (operated with certain program) are used.

IV. Conclusion

Once the optimal plan of development of cargo terminal is created, it will be possible to gain following benefits- to increase the total carrying capacity of the terminal and to decrease the amount of human work, while the time in which each carriage is handled increases. In both cases the considerable accuses are obtained.

VII. References

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